From:	John Garnham
To:	Ana Maria Maxey
Subject:	FW: ASU Minimum pressure adjusment MOD
Date:	Thursday, August 22, 2019 7:12:34 AM
Attachments:	MOD-071-46-0460_Original.pdf.pdf ASU Minimum pressure adjustment status car and AS.xlsx ASU MOD 071-46-0460 status as of 7-27-2018.pdf

---

From: Frank Kiraly <fkiraly@bart.gov>
Sent: Monday, July 30, 2018 7:26 AM
To: Henry Kolesar <hkolesa@bart.gov>; Benjamin Holland <bhollan@bart.gov>; John Garnham <JGarnha@bart.gov>; Timothy Smith <TSmith2@bart.gov>; 'Jim LaGuardia (jlaguar@caltel.com)' <jlaguar@caltel.com>
Cc: Edmund Tollefsen <ETollefsen@bart.gov>; Garland Wong <GWong3@bart.gov>
Subject: FW: ASU Minimum pressure adjusment MOD

fyi

From: Robin Lanoue <robin.lanoue@rail.bombardier.com>
Sent: Friday, July 27, 2018 9:33 AM
To: Frank Kiraly <fkiraly@bart.gov>
Cc: Denis Arsenault <denis.arsenault@rail.bombardier.com>; Stephen Stallings <sstalli@bart.gov>; Gabriel Forget <gabriel.forget@rail.bombardier.com>
Subject: ASU Minimum pressure adjusment MOD

Frank,

MOD 071-46-0460 is the mod to adjust the minimum internal pressure. I also reviewed the effectivity of the MOD and it applies only for ASU 52078970 S/N 1 to 32. SN 33 and up are delivered to Bombardier adjusted by MATTEI. I also revised AVM to reflect the car done under a WAROUND WO and I confirm we use the FMI 17/005 of MATTEI.

I also join a spreadsheet showing the location of each ASU, the mod status for each. I still need to identify where is SN 1,2 and 4. I believe they are test units never to be used on a car and I ask confirmation to Doug Franz of MATTEI. I still not been replied.

I also request Stephen inquiry about if ASU components needs to be changed or disassembly and cleaned if there is a oil spill due to insufficient pressure.

Note: On the AVM status pdf sheet please note that the Modification date will be update at midnight tonight to show 7/27/2018 since I revised today the AVM status to “8, Completed” based on WARROUND WO done previously in the last months.

Best regards,

Robin Lanoue
PI Supervisor, BART project
510-512-2443

From: Denis Houle
Sent: Friday, July 27, 2018 1:58 AM
To: Robin Lanoue <robin.lanoue@rail.bombardier.com>; Darryl Lawrence <darryl.lawrence@rail.bombardier.com>
Cc: Denis Arsenault <denis.arsenault@rail.bombardier.com>
Subject: RE: ASU Minimum pressure adjusment MOD S/N effectivity

Robin,
FMI in the mod-071-46-460 says for serial numbers 1 to 32.
Serial numbers 33 and up will have the minimum back pressure adjusted properly by MATTEI.
Denis

From: Robin Lanoue
Sent: Thursday, July 26, 2018 8:25 PM
To: Darryl Lawrence <darryl.lawrence@rail.bombardier.com>
Cc: Denis Houle <denis.houle@rail.bombardier.com>; Denis Arsenault <denis.arsenault@rail.bombardier.com>
Subject: ASU Minimum pressure adjusment MOD S/N effectivity

Darryl,

Can you confirm me that the MOD 071-46-0460 was effective only for ASU 52078970 Serial number 1 to 32 only?

33 and up did have the minimum back pressure adjusted properly by MATTEI?

Best regards,

Robin

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MODIFICATION NOTICE

ORIGINAL

BOMBARDIER

No	Contract	Site	Sequence
	071	46	0460

Project number: _____

Issued by	Drafter	Approval		Date
		Methods	*Quality Assurance*	
MET [X] ENG [ ]	Houle, Denis	Houle, Denis	Begor, Tricia	2018-01-11
Work Station	Notice Title		Contractor	
23	(TI-3511) raise compressor min pressure valve setting to avoid long term oil leaking		MATTEI TRANSIT ENGINEERING	
Prototype	Tests	FMI - SMI	Replace Notice	
Yes [ ] No [X]	Yes [X] No [ ]	520078970 MATTEI TRANSIT ENGINEERING		

Replaced by Notices:

Serial numbers:

001	002	003
004	005	006
007	008	009
010	011	012
013	014	015
016	017	018
019	020	021
022	023	024
025	026	027
028	029	030
031	032	

Open Items List: TI-3511

Documents:

Sketches
071-46-0460-SK

Process
MATTIE-FCN-17-005

Testing Procedure
071-46-0460.01

Comments: *safety issues: Wear hard hat when working under the car. Turn off the LVDC circuit breaker to prevent the ASU from running. Open the main reservoir (MR) drain valve to reduce MR pressure to 0 psi.
*Tools needed: Mechanical Technician's tool box.

Notice Reason: TI-3511, compressor minimum pressure valve setting raised. This adjustment will reduce oil carry-over, which is discharging from the air dryer exaust silencers. This is an improvement to avoid long term oil leaking.

Work Completed by	Signature	Date Completed

MODIFICATION NOTICE

BOMBARDIER

No

Contract	Site	Sequence
071	46	0460

Work Description: Locate air supply unit (520078970) on under frame center left side. See mod sketch 071-46-0460-SK and follow Mattie-FCN-17-005 Rev 00.

Estimated Minutes:

Minutes	Nbr. Men	Car Model	Car Section
90	1	001	UNDERFRAME CENTER AREA
90	1	002	UNDERFRAME CENTER AREA

Work Completed by	Signature	Date Completed

PART 1

ASSEMBLY BOOK

BOMBARDIER

LIST OF MATERIAL

Contract	Page	Date	Work Station	Reference	Tests Required	Project Number
071	1 / 1	2018-01-11	23	520078970	Yes [X] No [ ]	

Notice Number	Replace Notice	Notice Title	Work Ticket
071-46-0460		(TI-3511) raise compressor min pressure valve setting to avoid long term oil leaking	

Applicable Models

Model	001	002
Section	UNDERFRAME CENTER	UNDERFRAME CENTER
Time in Minutes	90	90
Nbr. Men	1.00	1.00

Imputation

Documents	Rev
Sketches 071-46-0460-SK **Procedures** MATTIE-FCN-17-005 **Testing Procedure** 071-46-0460.01	00

Quantity per Model	Part/Tool number	Rev	Description		UM
( )					

Print Date
2018-02-02

PART 2

ASSEMBLY BOOK

BOMBARDIER

OPERATIONS

Contract	Page	Date	Work Station	Reference	Tests Required	Project Number
071	1/ 1	2018-01-11	23	520078970	Yes [X] No [ ]	

Notice Number	Replace Notice	Notice Title	Work Ticket
071-46-0460		(TI-3511) raise compressor min pressure valve setting to avoid long term oil leaking	

Applicable Models

Model	001	002
Section	UNDERFRAME CENTER	UNDERFRAME CENTER
Time in Minutes	90	90
Nbr. Men	1	1

Imputation

Operation number	Operation Description	
10	*Safety issues: Wear hard hat when working under the car. Turn off the LVDC curcuit breaker to preveint the ASU from running. Open the main reservoir (MR) drain valve to reduce MR pressure to 0 psi. *Tools needed: Mechanical Technician's tool box. Locate air supply unit (520078970) on under frame center left side. See mod sketch 071-46-0460-SK and follow Mattie-FCN-17-005 Rev 00. Perform test procedure 071-46-0460.01	

Print Date
2018-02-02

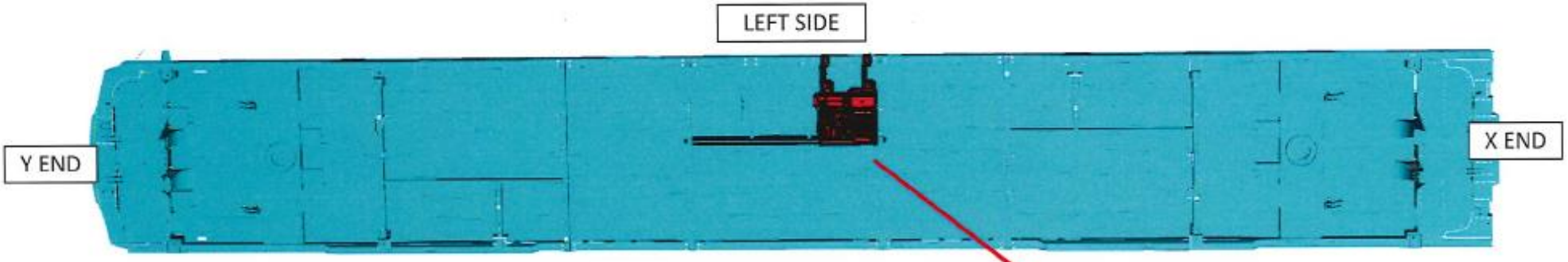
SAFETY INFORMATION AND PRT LIST

SAFETY INFORMATION

PRT LIST

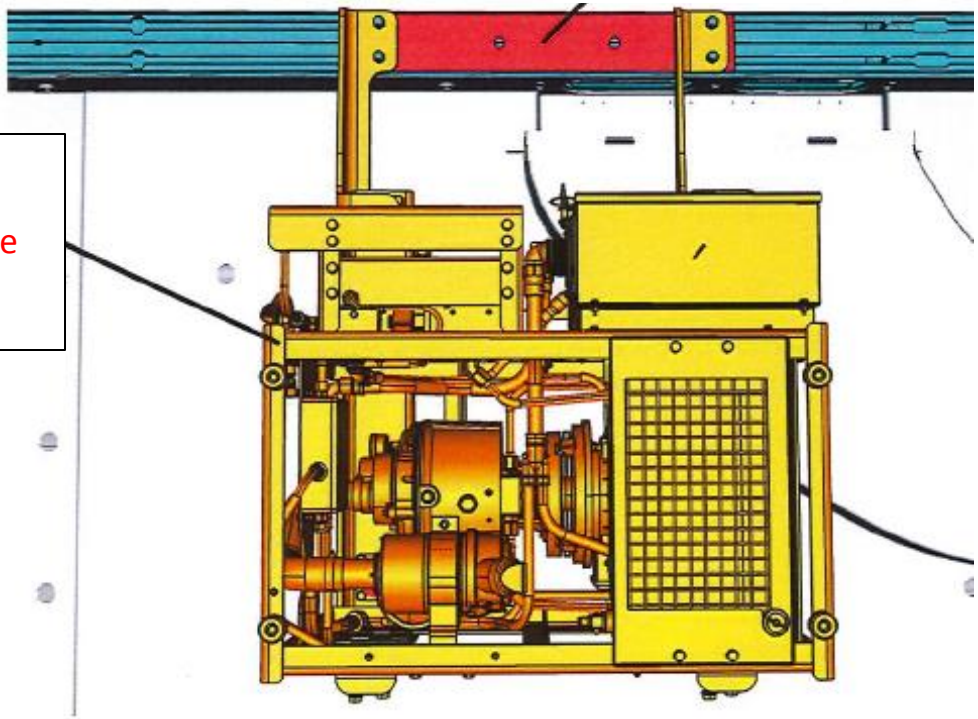
CATEGORY	PRT	DESCRIPTION	QTY

WORK LOCATION

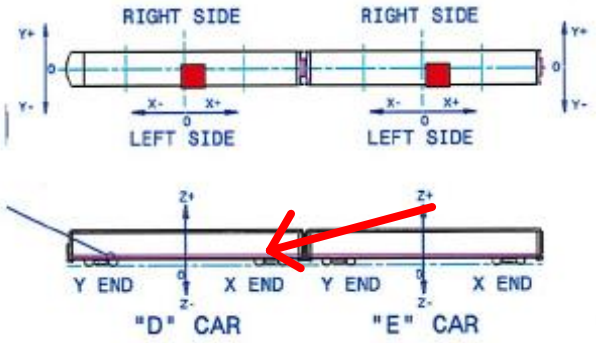


BOTTOM VIEW OF UNDERFRAME

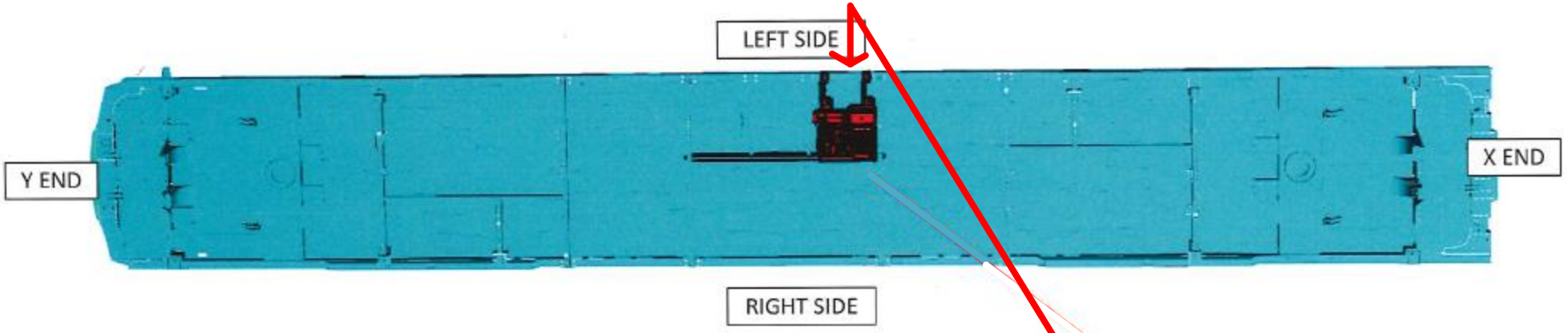
*Locate air supply unit 520078970 on under frame center left side.

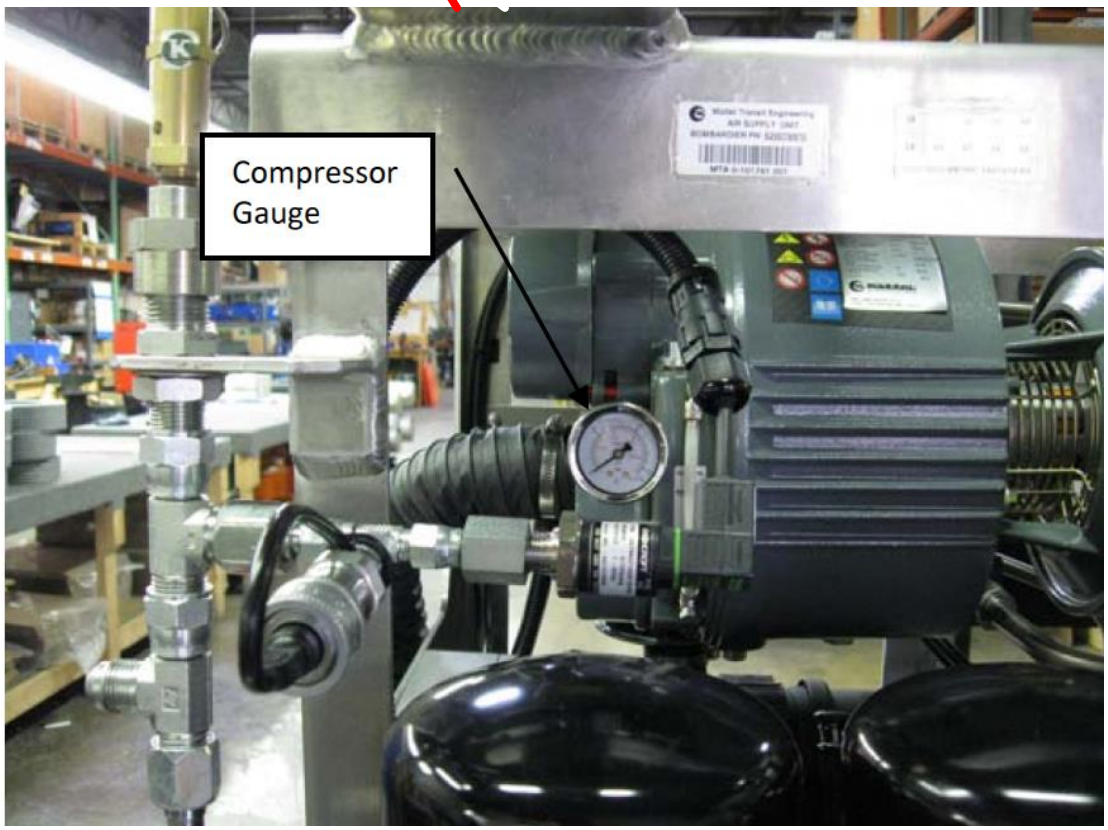


BOTTOM VIEW OF ASU



ASSEMBLY STEP 1





VIEW A.S.U. FROM LEFT SIDE

*See Mattie-FCM-17-005 Rev 00. Wear hard hat when working under the car. Turn off the LVDC circuit breaker to prevent the ASU from running. Open the main reservoir (MR) drain valve to reduce MR pressure to 0 psi. Verify compressor gauge says 0 psi before starting this mod.

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Field Change Notice

FCN # 17/005
Revision 00

Materials Affected:

Project:	BART	**Project Ref.:**	V06
Carbuilder:	Bombardier	**ECN Number:**	N/A
Part Description:	Air Supply Unit	**Part Number:**	0-101741

Reason for FCN:

___ (1) Design Error	___ (2) Discrepant Material
_X_ (3) Product Improvement	___ (4) Customer Change
___ (5) Supplier Change	___ (6) Other (describe)

Description of FCN:

This FCN is issued to raise the setting of the Compressor Minimum Pressure Valve. This adjustment will reduce oil carry-over, which is discharging from the Air Dryer exhaust silencers.

Effectivity:

_X_ (1) Fleet	___ (2) Evaluation / Test (specify quantity)
___ (3) Units In-house (at TES)	___ (4) Other

Implementation:

___ (1) Urgent	_X_ (2) Vehicle Availability
___ (3) Routine Maintenance	___ (4) Other (Prior to Shipment):

Approvals:

Mattei Transit Engineering	Prepared by / Date:	A. J. Murgia	9/6/2017
	Project Engineering:	A. J. Murgia	9/6/2017
	Approved by:	A. J. Murgia	9/6/2017
Customer	Approval to Proceed:	J. F. Boucher	

Closure:

MTE	Work Completed:		
Customer	Approval to Close:		

STATUS OF DOCUMENT
Reviewed by Bombardier Transportation
☑ No comment
☐ Comments as noted: RESUBMIT
☐ Not accepted: RESUBMIT
☐ For information
Project: 071
Bombardier Part Number(s): 520078970
Material disposition (For bombardier use only): TAECO ☐ NA 3511
☐ Use as is ☑ Repair ☐ Scrap
Jean-François Boucher
NAME
SIGNATURE
Acceptance of documents does not relieve nor alter the supplier's obligations to meet the client and Bombardier's specifications.

Procedure

Materials Required:

No materials are required.

Tools Needed:

- Mechanical Technician's Tool Box

Adjustment Details:

WARNING: FOLLOW AUTHORITY-APPROVED SAFETY PROCEDURES WHEN WORKING ON THE AIR SUPPLY UNIT

1. Turn OFF the LVDC circuit breaker to prevent the ASU from running.
2. Open the Main Reservoir (MR) Drain Valve to reduce MR pressure to 0 psi.
3. Turn ON the LVDC circuit breaker. The ASU should start.
   Note: Air will begin venting from the Drain Valve.
4. Using an 8mm wrench, loosen the Minimum Pressure Valve (MPV) jam nut. See Figure 1.
5. Using a 2.5mm Allen wrench, adjust the MPV set screw until the compressor pressure gauge reads 120 ± 2 psi. See Figure 2.
6. Turn OFF the LVDC circuit breaker to stop the ASU.
7. Wait 30 seconds for the compressor gauge to reduce to 0 psi.

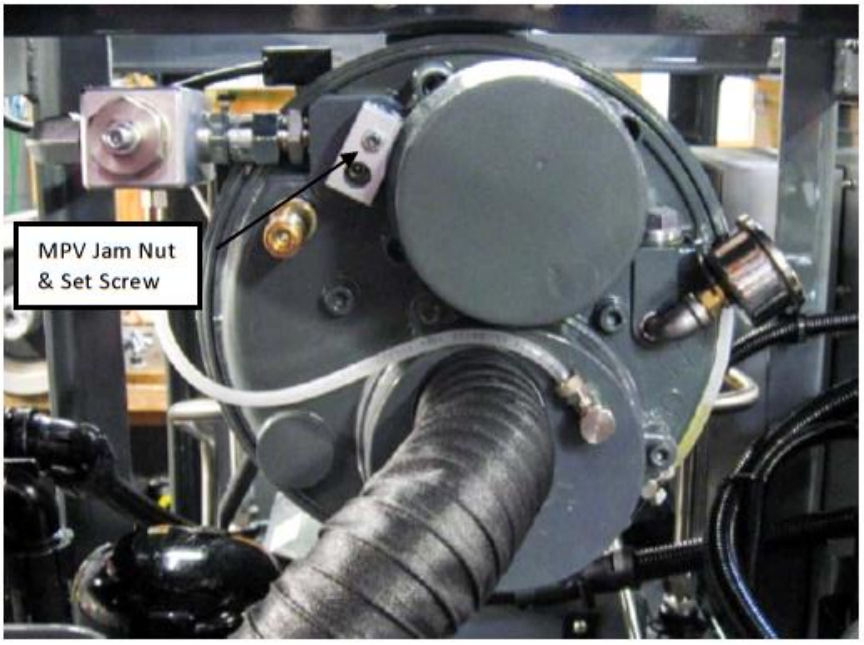

Figure 1

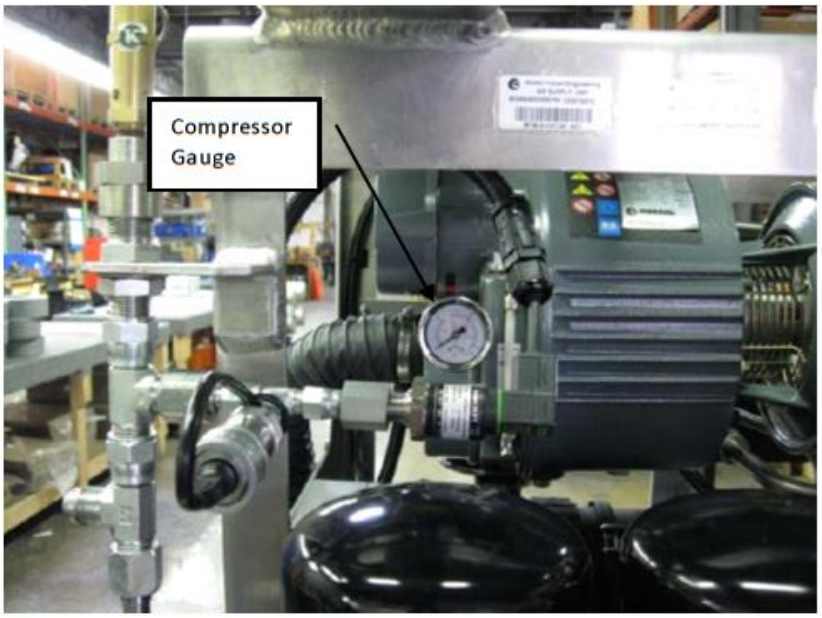

Figure 2

Testing Requirements:

1. Verify the compressor pressure gauge reads 0 psi.
2. Turn ON the LVDC circuit breaker. The ASU should start.
   Note: Air will begin venting from the Drain Valve.
3. Verify the compressor pressure gauge increases to 120 ± 2 psi.
4. Repeat pressure adjustment steps, if necessary.
5. Close the MR Drain valve and allow the ASU to run to achieve cutout pressure (approx. 140 psi).

ASU Serial No.	ASU Gauge and Fitting Replaced (Technician / Date)	Comments
001	----- ASU SN: 001 Non-Production (Qualification Test Unit) -----	
002	----- ASU SN: 002 Non-Production (Qualification Test Unit) -----	
003	----- ASU SN: 003 Non-Production (Qualification Test Unit) -----	
004	----- ASU SN: 004 Non-Production (FAI Unit) -----	
005		
006		
007		
008		
009		
010		
011		
012		
013		
014		
015		
016		
017		
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019		
020		
021		
022		
023		
024		
025		
026		
027		

ASU Serial No.	ASU Gauge and Fitting Replaced (Technician / Date)	Comments
028		
029		
030		
031		
032		

PERFORM TEST PROCEDURE 071-46-0460.01

BOMBARDIER Engineering Change Order

Project: San Francisco Metro'Fleet of the Future'

ECONo: 071-ECO-3511 ☐ FAST TRACK Authorized

ECRNo: 071-ECR-3511 **PCN:**

ChangeDescription: Compressor Minimum Pressure Valve setting raised. This adjustment will reduce oil carry-over, which is discharging from the Air Dryer exaust silencers.

Change category: C- Correction / First Cars Fit **Source of change:** Mattei

Applicable Internal Project Number:

1. Location of the change

Within VCM on the vehicle	Outside VCM on the vehicle	Outside VCM not on the vehicle
☐ Update Nomenclature First	☐ Hardware Subcontractor	☐ Hardware Subcontractor
☐ Update Bombardier Dwgs First	☐ Software Subcontractor	☐ Software Subcontractor
	☐ Software Bombardier	☐ Software Bombardier

2. Replaces

ECO no:

3. ECO Pre-requisites & co-requisites

Pre-requisites: **Co-requisites:**

4. Bombardier documents affected by the change

For Subcontractor documents affected, see attached FMI or ECN

Drawing or Document Type	Drawing or Document Number	Actual Rev.	Doc No. Rev. Status (Y/N) Up to Date	Doc No. Rev. Status (Y/N) To be Updated
CATIA Model				
Bomb Dwg for Purchasing				
Bomb Primary Part Sketches				
Approved SVDD/FMI	FCN-17-005	00	Yes	

5. Change Effectivity

- ☐ Cut-In Change with Hard Configuration
- ☐ Cut-In Change with Soft Configuration
- ☑ Full Project Change with retrofit
- ☐ Full Project Change without retrofit

Effectivity indicator:

☐ Car No ☑ Serial No ☐ Date ☐ Other

New Part Modification Level:

Date new or modified part is available:

Effectivity Range: S/N 001 to 032

6. Tests required after the change

Testing: ○ Yes ◉ No

Information:

Refer to FMI.

7. Validation of the change

Validation: ○ Yes ◉ No

Information:

8. Prepared by

Name Jean Francois Boucher

Signature_____ 1/8/2018

Date

9. Approved by

☐ For Validation ☐ For Service

Name

Signature_____

Date

10. Nomenclature - CM Group

Nomenclature:

Signature_____

Draft Room:

Signature_____

Config Mgmt:

Signature_____

11. Free text field

No configuration change as parts before and after are interchangeable. This is an improvement to avoid long term oil leaking.

Action:

IMT

mattei® TRANSIT ENGINEERING

Field Change Notice

FCN # 17/005
Revision 00

Materials Affected:

Project:	BART	**Project Ref.:**	V06
Carbuilder:	Bombardier	**ECN Number:**	N/A
Part Description:	Air Supply Unit	**Part Number:**	0-101741

Reason for FCN:

___ (1) Design Error	___ (2) Discrepant Material
_X_ (3) Product Improvement	___ (4) Customer Change
___ (5) Supplier Change	___ (6) Other (describe)

Description of FCN:

This FCN is issued to raise the setting of the Compressor Minimum Pressure Valve. This adjustment will reduce oil carry-over, which is discharging from the Air Dryer exhaust silencers.

Effectivity:

_X_ (1) Fleet	___ (2) Evaluation / Test (specify quantity)
___ (3) Units In-house (at TES)	___ (4) Other

Implementation:

___ (1) Urgent	_X_ (2) Vehicle Availability
___ (3) Routine Maintenance	___ (4) Other (Prior to Shipment):

Approvals:

Mattei Transit Engineering	Prepared by / Date:	A. J. Murgia	9/6/2017
	Project Engineering:	A. J. Murgia	9/6/2017
	Approved by:	A. J. Murgia	9/6/2017
Customer	Approval to Proceed:	J. F. Boucher	

Closure:

MTE	Work Completed:		
Customer	Approval to Close:		

STATUS OF DOCUMENT
Reviewed by Bombardier Transportation

- ☒ No comment
- ☐ Comments as noted: RESUBMIT
- ☐ Not accepted: RESUBMIT
- ☐ For information

Project	*Bombardier Part Number(s)*
071	520078970

Material disposition (For Bombardier use only) — TI/ECO ☐ NA 3511

☐ Use as is ☒ Repair ☐ Scrap

Jean-François Boucher
NAME

SIGNATURE

Acceptance of documents does not relieve nor alter the supplier's obligations to meet the Client's and Bombardier's specifications.

Procedure

Materials Required:

No materials are required.

Tools Needed:

- Mechanical Technician's Tool Box

Adjustment Details:

WARNING: FOLLOW AUTHORITY-APPROVED SAFETY PROCEDURES WHEN WORKING ON THE AIR SUPPLY UNIT

1. Turn OFF the LVDC circuit breaker to prevent the ASU from running.
2. Open the Main Reservoir (MR) Drain Valve to reduce MR pressure to 0 psi.
3. Turn ON the LVDC circuit breaker. The ASU should start.
   Note: Air will begin venting from the Drain Valve.
4. Using an 8mm wrench, loosen the Minimum Pressure Valve (MPV) jam nut. See Figure 1.
5. Using a 2.5mm Allen wrench, adjust the MPV set screw until the compressor pressure gauge reads 120 ± 2 psi. See Figure 2.
6. Turn OFF the LVDC circuit breaker to stop the ASU.
7. Wait 30 seconds for the compressor gauge to reduce to 0 psi.

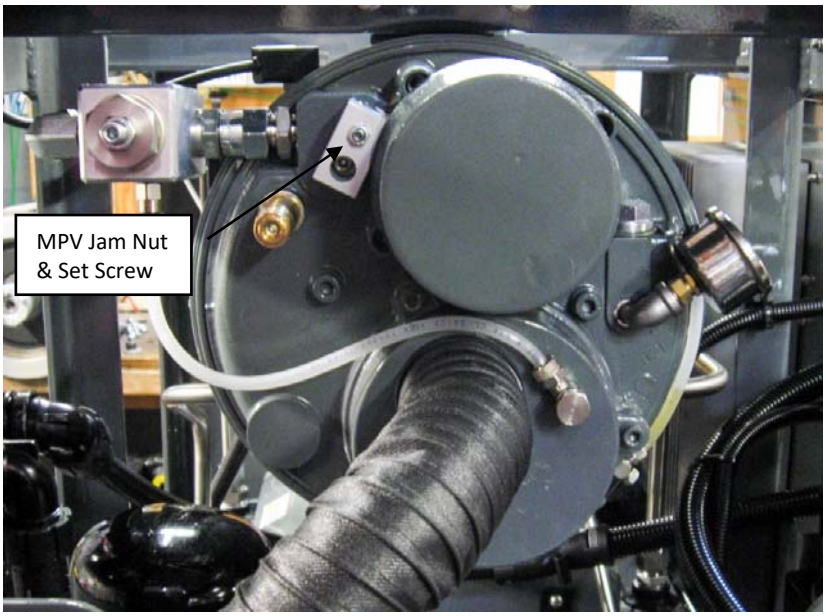

Figure 1

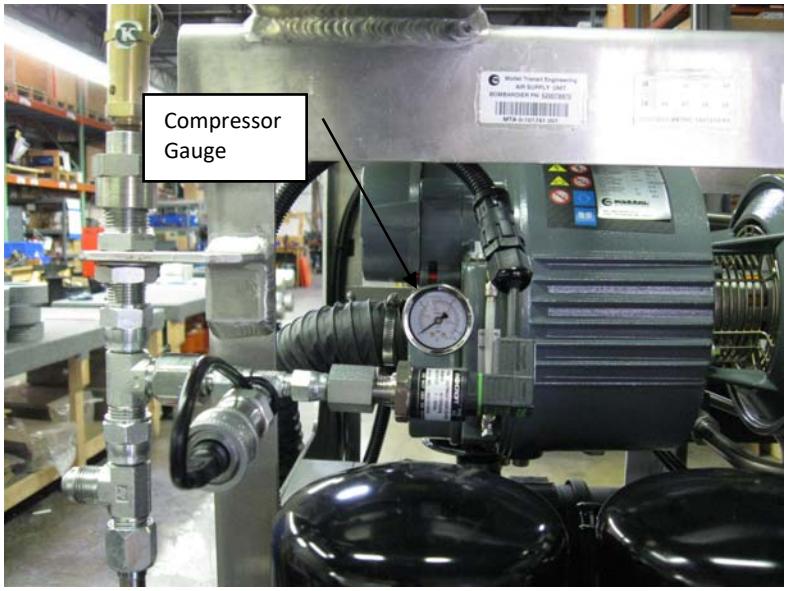

Figure 2

Testing Requirements:

1. Verify the compressor pressure gauge reads 0 psi.
2. Turn ON the LVDC circuit breaker. The ASU should start.
   Note: Air will begin venting from the Drain Valve.
3. Verify the compressor pressure gauge increases to 120 ± 2 psi.
4. Repeat pressure adjustment steps, if necessary.
5. Close the MR Drain valve and allow the ASU to run to achieve cutout pressure (approx. 140 psi).

ASU Serial No.	ASU Gauge and Fitting Replaced (Technician / Date)	Comments
001	----- ASU SN: 001 Non-Production (Qualification Test Unit) -----	
002	----- ASU SN: 002 Non-Production (Qualification Test Unit) -----	
003	----- ASU SN: 003 Non-Production (Qualification Test Unit) -----	
004	----- ASU SN: 004 Non-Production (FAI Unit) -----	
005		
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014		
015		
016		
017		
018		
019		
020		
021		
022		
023		
024		
025		
026		
027		

ASU Serial No.	ASU Gauge and Fitting Replaced (Technician / Date)	Comments
028		
029		
030		
031		
032		

MODIFICATION NOTICE TEST PROCEDURE	MOD No.: **071-46-0460.01**
PREPARED BY: **MICHAEL CLACKLER** SITE: **PLATTSBURGH, NY**	DATE: **2018-01-25**

NO.	OPERATIONS	LOCATION	EXPECTED RESULTS	MEASUREMENT	PASS	FAIL
1.0	**TEST PROCEDURE / INSPECTION**					
1.1	Ensure the vehicle air system is fully pressurized While monitoring the Air compressor gauge, slowly drain air pressure from any vehicle reservoir until the air compressor starts then close the reservoir valve **NOTE:** During compressor operation, the air dryer unit may discharge air from its exhaust, this is normal, do not stand under the vent during compressor operation	Undercar	Air compressor Starts (cuts-in) at 130 ± 5 psi and then Stops (cuts-out) at 150 ± 5 psi			

2.0	**TEST EQUIPMENT REQUIRED**			
	Description	**Model No.**	**Bombardier No.**	**Calibration Due**
	None Required			

* ***Record sheets must be retained as Quality records by Quality Assurance and/or Customer Service in the vehicle history file.***

CUSTOMER VEH. NO.	DATE EXECUTED	TECHNICIAN	STAMP & INITIALS
ENGINEERING VEH. NO.			

Car Numbe	Serial Number	Site Responsible	Location	Estimated Minutes	Status	Modification Date	Modified by
	001	46			1, To do, awaiting for parts	2018-01-16	E_LSD
	002	46			1, To do, awaiting for parts	2018-01-16	E_LSD
	003	46			1, To do, awaiting for parts	2018-01-16	E_LSD
	004	46			1, To do, awaiting for parts	2018-01-16	E_LSD
	007	40			1, To do, awaiting for parts	2018-06-03	E_LSD
	016	40			1, To do, awaiting for parts	2018-01-16	E_LSD
	017	40			1, To do, awaiting for parts	2018-07-20	E_LSD
	018	40			1, To do, awaiting for parts	2018-01-16	E_LSD
	025	40			1, To do, awaiting for parts	2018-03-01	E_LSD
3001	014	40	718176	90	8, Completed	2018-01-16	E_LSD
3002	006	40	718177	90	8, Completed	2018-01-16	E_LSD
3003	008	40	718178	90	8, Completed	2018-01-16	E_LSD
3004	013	40	719427	90	8, Completed	2018-02-23	E_LSD
3005	015	40	719533	90	8, Completed	2018-01-16	E_LSD
3006	027	40	719529	90	8, Completed	2018-01-16	E_LSD
3007	021	40	719521	90	8, Completed	2018-01-16	E_LSD
3008	023	40	719914	90	8, Completed	2018-01-16	E_LSD
3009	031	46		90	8, Completed	2018-03-02	Ruwet,Lynn
3011	019	46		90	8, Completed	2018-04-02	Ruwet,Lynn
4001	010	40	7112578	90	8, Completed	2018-07-25	Ackad,Jonathan
4002	009	40	718181	90	8, Completed	2018-01-16	E_LSD
4003	011	40	718184	90	8, Completed	2018-01-16	E_LSD
4004	012	40	718186	90	8, Completed	2018-03-01	E_LSD
4005	005	40	718187	90	8, Completed	2018-01-16	E_LSD
4006	026	40	718188	90	8, Completed	2018-01-16	E_LSD
4007	020	40	717483	90	8, Completed	2018-01-16	E_LSD
4008	028	40	717655	90	8, Completed	2018-01-16	E_LSD
4009	022	40	719523	90	8, Completed	2018-01-16	E_LSD
4010	024	40	719524	90	8, Completed	2018-01-16	E_LSD
4012	029	40	719956	90	8, Completed	2018-01-16	E_LSD
4014	030	46		90	8, Completed	2018-03-13	Ruwet,Lynn
4015	032	46		90	8, Completed	2018-03-26	Ruwet,Lynn

Date of last synchronization	Status of last synchronization
2018-01-16	Error: Not found in repository
2018-01-16	Error: Not found in repository
2018-01-16	Successfully synchronized
2018-01-16	Error: Not found in repository
2018-06-03	Successfully synchronized
2018-01-16	Successfully synchronized
2018-07-20	Successfully synchronized
2018-01-16	Successfully synchronized
2018-03-01	Successfully synchronized
2018-01-16	Successfully synchronized
2018-01-16	Successfully synchronized
2018-01-16	Successfully synchronized
2018-02-23	Successfully synchronized
2018-01-16	Successfully synchronized
2018-01-16	Successfully synchronized
2018-01-16	Successfully synchronized
2018-01-16	Successfully synchronized
2018-01-16	Successfully synchronized
2018-02-24	Successfully synchronized
2018-07-20	Successfully synchronized
2018-01-16	Successfully synchronized
2018-01-16	Successfully synchronized
2018-03-01	Successfully synchronized
2018-01-16	Successfully synchronized
2018-01-16	Successfully synchronized
2018-01-16	Successfully synchronized
2018-01-16	Successfully synchronized
2018-01-16	Successfully synchronized
2018-01-16	Successfully synchronized
2018-01-16	Successfully synchronized
2018-01-16	Successfully synchronized
2018-01-19	Successfully synchronized
2018-02-07	Successfully synchronized

ASU	Installed on							
S/N	Car eng #	Car #	AVM Mod Status	MOD Effective	WARROund	Status	Location	comments
1	Not instld	Not instld	1	YES	N/A	To do	??	
2	Not instld	Not instld	1	YES	N/A	To do	??	
3	Not instld	Not instld	1	YES	N/A	To do	At supplier	
4	Not instld	Not instld	1	YES	N/A	To do	??	
5	9	4005	1	YES	YES	Complete	CAR	
6	2	3002	1	YES	YES	Complete	CAR	
7	Not instld	Not instld	1	YES	N/A	To do	BT-REPAIR	At Supplier
8	3	3003	1	YES	YES	Complete	CAR	
9	6	4002	1	YES	YES	Complete	CAR	
10	5	4001	8	YES	YES + MOD	Complete	CAR	
11	7	4003	1	YES	YES	Complete	CAR	
12	8	4004	1	YES	YES	Complete	CAR	
13	4	3004	1	YES	YES	Complete	CAR	
14	1	3001	1	YES	YES	Complete	CAR	
15	11	3005	1	YES	YES	Complete	CAR	
16	Not instld	Not instld	1	YES	N/A	To do	CAPITAL SPARE	at BART
17	Not instld	Not instld	1	YES	N/A	To do	BT-REPAIR	At Supplier
18	Not instld	Not instld	1	YES	N/A	To do	Warehouse	
19	26	3011	8	YES	N/A	Complete	CAR	
20	12	4007	1	YES	YES	Complete	CAR	
21	16	3007	1	YES	YES	Complete	CAR	
22	15	4009	1	YES	YES	Complete	CAR	
23	18	3008	1	YES	NO	Complete	CAR	WO 719914
24	17	4010	1	YES	YES	Complete	CAR	
25	Not instld	Not instld	1	YES	N/A	To do	BT-REPAIR	At Supplier
26	10	4006	1	YES	YES	Complete	CAR	
27	13	3006	1	YES	YES	Complete	CAR	
28	14	4008	1	YES	YES	Complete	CAR	
29	20	4012	1	YES	YES	Complete	CAR	
30	24	4014	8	YES	N/A	Complete	CAR	
31	21	3009	8	YES	N/A	Complete	CAR	
32	25	4015	8	YES	N/A	Complete	CAR	
33	23	3010	N/A	NO	N/A	N/A	CAR	
34	22	4013	N/A	NO	N/A	N/A	CAR	
35	34	4020	N/A	NO	N/A	N/A	CAR	
36	19	4011	N/A	NO	N/A	N/A	CAR	
37	30	4018	N/A	NO	N/A	N/A	CAR	
38	Not instld	Not instld	N/A	NO	N/A	N/A	PLATTSBURGH	
39	28	3012	N/A	NO	N/A	N/A	CAR	
40	29	4017	N/A	NO	N/A	N/A	CAR	
41	27	4016	N/A	NO	N/A	N/A	CAR	
42	32	4019	N/A	NO	N/A	N/A	CAR	
43	Not instld	Not instld	N/A	NO	N/A	N/A	PLATTSBURGH	
44	Not instld	Not instld	N/A	NO	N/A	N/A	CAPITAL SPARE	
45	Not instld	Not instld	N/A	NO	N/A	N/A	PLATTSBURGH	
46	Not instld	Not instld	N/A	NO	N/A	N/A	PLATTSBURGH	
47	33	3014	N/A	NO	N/A	N/A	CAR	
48	Not instld	Not instld	N/A	NO	N/A	N/A	PLATTSBURGH	
49	Not instld	Not instld	N/A	NO	N/A	N/A	CAPITAL SPARE	
50	Not instld	Not instld	N/A	NO	N/A	N/A	PLATTSBURGH	
51	Not instld	Not instld	N/A	NO	N/A	N/A	PLATTSBURGH	
52	Not instld	Not instld	N/A	NO	N/A	N/A	PLATTSBURGH	
53	Not instld	Not instld	N/A	NO	N/A	N/A	PLATTSBURGH	
54	Not instld	Not instld	N/A	NO	N/A	N/A	PLATTSBURGH	
55	Not instld	Not instld	N/A	NO	N/A	N/A	PLATTSBURGH	
56	Not instld	Not instld	N/A	NO	N/A	N/A	CAPITAL SPARE	
57	Not instld	Not instld	N/A	NO	N/A	N/A	CAPITAL SPARE	
58	Not instld	Not instld	N/A	NO	N/A	N/A	CAPITAL SPARE	
59	Not instld	Not instld	N/A	NO	N/A	N/A	CAPITAL SPARE	
60	Not instld	Not instld	N/A	NO	N/A	N/A	CAPITAL SPARE	
61	Not instld	Not instld	N/A	NO	N/A	N/A	CAPITAL SPARE	